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RAW SEQUENCE LISTING   DATE: 07/24/2002
PATENT APPLICATION: US/09/963,761B   TIME: 14:30:49

Input Set : A:\pto.vsk.txt
Output Set: N:\CRF3\07242002\I963761B.raw

```
  3 <110> APPLICANT: Arazi, Tzahi
  4         Gal-On, Amit
  5         Shiboleth, Yoel Moshe
  7 <120> TITLE OF INVENTION: VECTORS FOR EXPRESSING HETEROLOGOUS PEPTIDES AT THE AMINO-
TERMINUS OF
  8         POTYVIRUS COAT PROTEIN, METHODS FOR USE THEREOF,PLANTS INFECTED WITH SAME AND
  9         METHODS OF VACCINATION USING SAME
 11 <130> FILE REFERENCE: 1686/4
 13 <140> CURRENT APPLICATION NUMBER: 09/963,761B
 14 <141> CURRENT FILING DATE: 2001-09-27
 16 <150> PRIOR APPLICATION NUMBER: US 60/253,136
 17 <151> PRIOR FILING DATE: 2000-11-28
 19 <160> NUMBER OF SEQ ID NOS: 33
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 837
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Zucchini yellow mosaic virus
 28 <400> SEQUENCE: 1
 29 tcaggcactc agccaactgt ggcagatgct ggagctacaa agaaagataa agaagatgac      60
 31 aaagggaaaa acaaggacgt tacaggctcc ggctcaggtg agaaaacagt agcagctgtc     120
 33 acgaaggaca aggatgtgaa tgctggttct catgggaaaa ttgtgccgcg tctttcgaag     180
 35 atcacaaaga aaatgtcatt gccacgcgtg aaaggaaatg tgatactcga tattgatcat     240
 37 ttgctggaat ataaaccgga tcaaattgag ttatataaca cacgagcgtc tcatcagcag     300
 39 ttcgcctctt ggttcaacca ggttaagacg gaatatgatt tgaacgagca acagatggga     360
 41 gttgtaatga atggtttcat ggtttggtgc attgagaatg gcacttcacc cgacattaat     420
 43 ggagtgtggg ttatgatgga cggaaatgag caagttgagt atcccttgaa accaatagtt     480
 45 gaaaatgcaa agccaacgct gcggcaaata atgcatcatt tttcagatgc agcggaggca     540
 47 tatatagaga tgagaaatgc agaggcacca tacatgccga ggtatggttt gcttcgaaac     600
 49 ctacgggata ggagtttagc acgatatgct tttgatttct atgaagtcaa ttctaaaact     660
 51 cctgaaagag cccgcgaagc tgttgcgcag atgaaagcag cagctcttag caatgtttct     720
 53 tcaaggttgt ttggccttga tggaaatgtt gccaccacta gcgaagacac tgaacggcac     780
 55 actgcacgtg atgttaatag aaacatgcac accttactag gtgtgaatac aatgcag       837
 58 <210> SEQ ID NO: 2
 59 <211> LENGTH: 279
 60 <212> TYPE: PRT
 61 <213> ORGANISM: Zucchini yellow mosaic virus
 63 <400> SEQUENCE: 2
 65 Ser Gly Thr Gln Pro Thr Val Ala Asp Ala Gly Ala Thr Lys Lys Asp
 66 1               5                  10                  15
 69 Lys Glu Asp Asp Lys Gly Lys Asn Lys Asp Val Thr Gly Ser Gly Ser
 70                 20                  25                  30
 73 Gly Glu Lys Thr Val Ala Ala Val Thr Lys Asp Lys Asp Val Asn Ala
 74             35                  40                  45
```

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 77 Gly Ser His Gly Lys Ile Val Pro Arg Leu Ser Lys Ile Thr Lys Lys
 78     50                  55                  60
 81 Met Ser Leu Pro Arg Val Lys Gly Asn Val Ile Leu Asp Ile Asp His
 82 65                  70                  75                  80
 85 Leu Leu Glu Tyr Lys Pro Asp Gln Ile Glu Leu Tyr Asn Thr Arg Ala
 86              .85                  90                  95
 89 Ser His Gln Gln Phe Ala Ser Trp Phe Asn Gln Val Lys Thr Glu Tyr
 90             100                 105                 110
 93 Asp Leu Asn Glu Gln Gln Met Gly Val Val Met Asn Gly Phe Met Val
 94         115                 120                 125
 97 Trp Cys Ile Glu Asn Gly Thr Ser Pro Asp Ile Asn Gly Val Trp Val
 98     130                 135                 140
101 Met Met Asp Gly Asn Glu Gln Val Glu Tyr Pro Leu Lys Pro Ile Val
102 145                 150                 155                 160
105 Glu Asn Ala Lys Pro Thr Leu Arg Gln Ile Met His His Phe Ser Asp
106                 165                 170                 175
109 Ala Ala Glu Ala Tyr Ile Glu Met Arg Asn Ala Glu Ala Pro Tyr Met
110             180                 185                 190
113 Pro Arg Tyr Gly Leu Leu Arg Asn Leu Arg Asp Arg Ser Leu Ala Arg
114         195                 200             205
117 Tyr Ala Phe Asp Phe Tyr Glu Val Asn Ser Lys Thr Pro Glu Arg Ala
118     210                 215                 220
121 Arg Glu Ala Val Ala Gln Met Lys Ala Ala Ala Leu Ser Asn Val Ser
122 225                 230                 235                 240
125 Ser Arg Leu Phe Gly Leu Asp Gly Asn Val Ala Thr Thr Ser Glu Asp
126             245                 250                 255
129 Thr Glu Arg His Thr Ala Arg Asp Val Asn Arg Asn Met His Thr Leu
130             260                 265                 270
133 Leu Gly Val Asn Thr Met Gln
134         275
137 <210> SEQ ID NO: 3
138 <211> LENGTH: 20
139 <212> TYPE: DNA
140 <213> ORGANISM: Zucchini yellow mosaic virus
142 <400> SEQUENCE: 3
143 catttccttt cacgcgtggc                                        20
146 <210> SEQ ID NO: 4
147 <211> LENGTH: 21
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-Histidine with a Serine at
its
153         N'
155 <400> SEQUENCE: 4
156 tcacaccatc accatcacca t                                      21
159 <210> SEQ ID NO: 5
160 <211> LENGTH: 7
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial
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C--> appears at lines 149 and 162

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      164 <220> FEATURE:
      165 <223> OTHER INFORMATION: Hexa-Histidine (His) peptide fuse to serine (Ser) at its N'
      167 <400> SEQUENCE: 5
      169 Ser His His His His His
      170 1               5
      173 <210> SEQ ID NO: 6
      174 <211> LENGTH: 53
      175 <212> TYPE: DNA
C--> 176 <213> ORGANISM: Artificial
      178 <220> FEATURE:
      179 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-histidine fused to the N-
termin
      180      us of Zucchini Yellow Mosaic Virus coat protein gene
      182 <400> SEQUENCE: 6
      183 cagctgcagt cacaccatca ccatcaccat tcaggcactc agccaactgt ggc          53
      186 <210> SEQ ID NO: 7
      187 <211> LENGTH: 55
      188 <212> TYPE: DNA
C--> 189 <213> ORGANISM: Artificial
      191 <220> FEATURE:
      192 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-histidine fused to the N-
termin
      193      us of Zucchini Yellow Mosaic Virus coat protein gene of which the
      194      N' terminal 8 amino acids were deleted
      196 <400> SEQUENCE: 7
      197 cagctgcagt cacaccatca ccatcaccat gatactggag ctacaaagaa agaag        55
      200 <210> SEQ ID NO: 8
      201 <211> LENGTH: 45
      202 <212> TYPE: DNA
      203 <213> ORGANISM: Homo sapiens
      205 <400> SEQUENCE: 8
      206 tcagcatcag agcagaagct catttcagag gaggatctcg gatcc                  45
      209 <210> SEQ ID NO: 9
      210 <211> LENGTH: 15
      211 <212> TYPE: PRT
      212 <213> ORGANISM: Homo sapiens
      214 <400> SEQUENCE: 9
      216 Ser Ala Ser Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Gly Ser
      217 1               5               10              15
      220 <210> SEQ ID NO: 10
      221 <211> LENGTH: 77
      222 <212> TYPE: DNA
C--> 223 <213> ORGANISM: Artificial
      225 <220> FEATURE:
      226 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from Human
c-Myc
      227      -tag fused to the N-terminus of Zucchini Yellow Mosaic Virus (AGI
      228      I) coat protein gene
      230 <400> SEQUENCE: 10
      231 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcgg atcctcaggc   60
      233 actcagccaa ctgtggc                                                 77
      236 <210> SEQ ID NO: 11
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      237 <211> LENGTH: 82
      238 <212> TYPE: DNA
C--> 239 <213> ORGANISM: Artificial
      241 <220> FEATURE:
      242 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
      243      uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
      244      Virus (AGII) coat protein gene of which the N' terminal 8 amino a
      245      cids were deleted
      247 <400> SEQUENCE: 11
      248 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcgg atccgatact      60
      250 ggagctacaa agaaagataa ag                                              82
      253 <210> SEQ ID NO: 12
      254 <211> LENGTH: 81
      255 <212> TYPE: DNA
C--> 256 <213> ORGANISM: Artificial
      258 <220> FEATURE:
      259 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
      260      uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
      261      Virus (AGII) coat protein gene of which the N' terminal 13 amino
      262      acids were deleted
      264 <400> SEQUENCE: 12
      265 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcgg atccaagaaa      60
      267 gataaagaag atgacaaagg g                                               81
      270 <210> SEQ ID NO: 13
      271 <211> LENGTH: 31
      272 <212> TYPE: DNA
C--> 273 <213> ORGANISM: Artificial
      275 <220> FEATURE:
      276 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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      277      uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
      278      Virus (AGII) coat protein gene of which the N' terminal 18 amino
      279      acids were deleted
      281 <400> SEQUENCE: 13
      282 cgcggatccg atgacaaagg gaaaaacaag g                                    31
      285 <210> SEQ ID NO: 14
      286 <211> LENGTH: 30
      287 <212> TYPE: DNA
C--> 288 <213> ORGANISM: Artificial
      290 <220> FEATURE:
      291 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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      292      uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
      293      Virus (AGII) coat protein gene of which the N' terminal 23 amino
      294      acids were deleted
      296 <400> SEQUENCE: 14
      297 ctcggatcca acaaggatgt tacaggctcc                                      30
      300 <210> SEQ ID NO: 15
      301 <211> LENGTH: 27
      302 <212> TYPE: DNA
C--> 303 <213> ORGANISM: Artificial
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305 <220> FEATURE:
306 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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307   uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
308   Virus (AGII) coat protein gene of which the N' terminal 28 amino
309   acids were deleted
311 <400> SEQUENCE: 15
312 cgcggatccg gctccggctc aagtgag   27
315 <210> SEQ ID NO: 16
316 <211> LENGTH: 30
317 <212> TYPE: DNA
C--> 318 <213> ORGANISM: Artificial
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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322   uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
323   Virus (AGII) coat protein gene of which the N' terminal 33 amino
324   acids were deleted
326 <400> SEQUENCE: 16
327 cgcggatccg agaaaacagt ggcagctgtc   30
330 <210> SEQ ID NO: 17
331 <211> LENGTH: 28
332 <212> TYPE: DNA
C--> 333 <213> ORGANISM: Artificial
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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337   uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
338   Virus (AGII) coat protein gene of which the N' terminal 38 amino
339   acids were deleted
341 <400> SEQUENCE: 17
342 cgcggatccg ctgtcacgaa ggacaagg   28
345 <210> SEQ ID NO: 18
346 <211> LENGTH: 33
347 <212> TYPE: DNA
C--> 348 <213> ORGANISM: Artificial
350 <220> FEATURE:
351 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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352   uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
353   Virus (AGII) coat protein gene of which the N' terminal 43 amino
354   acids were deleted
356 <400> SEQUENCE: 18
357 cgcggatcca aggatgtaaa tgctggttct cat   33
360 <210> SEQ ID NO: 19
361 <211> LENGTH: 30
362 <212> TYPE: DNA
C--> 363 <213> ORGANISM: Artificial
365 <220> FEATURE:
366 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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367   uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
368   Virus (AGII) coat protein gene of which the N' terminal 48 amino

369   acids were deleted

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L:162 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:176 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:189 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:223 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:239 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:256 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:273 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:288 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:303 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
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